Application No.: 10/010389   Docket No.: SMQ-143/P6594

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for calculating the number of valid instructions within a microprocessor, comprising:

    advancing instructions along a microprocessor pipeline; ~~and~~

    edge detecting a transition from a valid ~~instructions~~ to an invalid instruction within the microprocessor pipeline[[.]]; and

    determining the number of valid instructions based on the edge detection of the valid instructions.

2. (Currently Amended) A method for calculating the number of valid instructions within a microprocessor, comprising:

    fetching a bundle of instructions; ~~and~~

    ~~edge detecting valid instructions within the bundle.~~

    edge detecting a transition from a valid instruction to an invalid instruction in the bundle of instructions; and

    determining the number of valid instructions up to the transition from the valid instruction to the invalid instruction.

3. (Previously presented) A method according to claim 2, further comprising shifting at least one instruction within the bundle.

4. (Previously Presented) A method according to claim 3, further comprising shifting at least one instruction based at least in part on the number of valid instructions in the bundle.

5. (Previously Presented) A method according to claim 3, further comprising compressing the bundle of instructions.

6. (Previously Presented) A method according to claim 3, further comprising compressing the bundle of instructions for a monotonic instruction bundle.

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